

Amendments to the Claims

The listing of claims below will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for minimizing an amount of data needed to test a geometry chunk in a frame against subarea boundaries in a compositing window, comprising the steps of:

defining the geometry chunk with a bounding region, wherein said bounding region defines ~~a space~~ an outline of the geometry ~~chunk occupies on the compositing window;~~
chunk;

storing data that defines said bounding region for use in processing the geometry chunk in a subsequent frame;

sending said data that defines said bounding region to graphics pipelines;

determining, from said data that defines said bounding region, a graphics pipeline of said graphics pipelines that will render the geometry chunk;

assigning a subarea in the compositing window to receive an output of said graphics pipeline; and

communicating data associated with the geometry chunk to said graphics pipeline;

wherein said graphics pipelines are configured to render the frame by spatial compositing through parallel processing, said data that defines said bounding region is less than said data associated with the geometry chunk, and the geometry chunk is different from said subarea.

2. (Previously Presented) The method of claim 1, wherein the geometry chunk is comprised of a piece of a geometry provided by a graphics application.

3-7. (Canceled)

8. (Original) The method of claim 1, wherein the geometry chunk is represented as a display list.

9. (Original) The method of claim 1, wherein the geometry chunk is represented as a vertex array object.

10. (Original) The method of claim 1, wherein the geometry chunk is represented as buffered vertices.

11. (Currently Amended) A system for minimizing an amount of data needed to test a geometry chunk in a frame against subarea boundaries in a compositing window, comprising:

graphics pipelines;

a geometry distributor configured to define a bounding region for the geometry chunk, to send data that defines said bounding region to said graphics pipelines to determine, from said data that defines said bounding region, a graphics pipeline of said graphics pipelines that will render the geometry chunk, to assign a subarea in the compositing window

to receive an output of said graphics pipeline, and to communicate data associated with the geometry chunk to said graphics pipeline; and

a memory configured to store said data that defines said bounding region for use in processing the geometry chunk in a subsequent frame;

wherein said bounding region defines ~~a space~~ an outline of the geometry ~~chunk~~
~~occupies on the compositing window; chunk;~~

wherein said graphics pipelines are configured to render the frame by spatial compositing through parallel processing;

wherein said data that defines said bounding region is less than said data associated with the geometry chunk; and

wherein the geometry chunk is different from said subarea.

12. (Previously Presented) The system of claim 11, further comprising a graphics application configured to provide the geometry chunk to said geometry distributor.

13. (Previously Presented) The system of claim 12, wherein said geometry distributor comprises a virtual graphics unit configured to interface with said graphics application.

14. (Previously Presented) The system of claim 11, wherein the geometry chunk is comprised of a piece of a geometry provided by a graphics application.

15-17. (Canceled)

18. (Previously Presented) The system of claim 11, wherein said geometry distributor comprises:

 a bounding region calculator configured to calculate said bounding region for the geometry chunk;

 a graphics pipeline assignor configured to assign said graphics pipeline to said subarea in the compositing window; and

 a graphics pipeline distributor configured to distribute the geometry chunk to the graphics pipeline.

19. (Original) The system of claim 11, wherein the geometry chunk is represented as a display list.

20. (Original) The system of claim 11, wherein the geometry chunk is represented as a vertex array object.

21. (Original) The system of claim 11, wherein the geometry chunk is represented as buffered vertices.